

ATTACHMENT J5

U.S. Army Fort Bliss Water Distribution System

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J5 U.S. Army Fort Bliss Water Distribution System

J5.1 U.S. Army Fort Bliss Overview

The U.S. Army Fort Bliss was established in November 1848 as the Post of El Paso. In March 1854, it was renamed Fort Bliss in honor of William Wallace Smith Bliss, a veteran of the Florida Seminole and Mexican Wars and later adjutant general of the Army's Western Division. Originally established to protect settlers from Indians and marauding bandits, it is one of the oldest posts in the United States Army. Although both infantry and cavalry soldiers could once be found on Fort Bliss, today the mission focus is on air defense artillery. As the center for air defense, Fort Bliss' partner organizations include:

11th Air Defense Artillery Brigade

3rd Armored Cavalry Regiment

William Beaumont Army Medical Center

U. S. Army Sergeants Major Academy

"Capstone" school in the U.S. Army's Noncommissioned Officer Education System

Joint Task Force Six

German Air Force Command (United States/Canada)

German Air Defense School

The U.S. Army Fort Bliss is located at the tip of West Texas on the borders of Texas and New Mexico. With 1.1 million acres, the Post is larger than the state of Rhode Island and can accommodate every weapon system in the Army. Although the main cantonment area is located in Texas, ranges extend into the state of New Mexico. Excellent ranges and immense training areas, coupled with America's third longest runway at Biggs Army airfield, make Fort Bliss a premier facility for training, mobilization, and deploying combat forces. Each year, many military training exercises occur at the Post, including the largest joint training exercise in the world, Roving Sands.

J5.2 Water Distribution System Description

J5.2.1 Water Distribution System Fixed Equipment Inventory

The U.S. Army Fort Bliss water distribution system consists of all appurtenances physically connected to the distribution system from the point at which the water is produced from government owned wells, to the point of demarcation defined by the real estate instruments. Generally, the point of demarcation will be the building footprint. The system may include, but is not limited to, wells, pipelines, valves, fire hydrants, pumps, tanks, and meters. The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the distribution system. The Offeror shall base the proposal on site inspections, information in the bidder's library, other pertinent information, and to a lesser degree the following description. Under no circumstances shall the successful Contractor be entitled to any adjustment based on the accuracy of the following description and inventory.

The water rights possessed by the U.S. Army Fort Bliss will not in any way shape or form be transferred to the Contractor as a result of any privatization action, or be considered as part of this scope.

Fort Bliss is considering implementation of a re-use watering system for parade grounds and other large turf areas, which will take treated sewage water from the City of El Paso or from an, as yet to be constructed, Fort Bliss water treatment facility. If implemented, the successful offeror will be required to accept ownership of all re-use water piping, valves, pumps, tanks, and other appurtenances associated with the re-use watering system.

Fort Bliss is also considering installation of a brackish water desalination plant on the range just off the main cantonment area. If installed, the successful offeror will be required to accept ownership of all piping, valves, pumps, tanks, and other appurtenances from the outfall of the plant to the connection to the existing raw water collection system.

J5.2.1.1 Description

The water treatment and distribution system at U.S. Army Fort Bliss consists of groundwater wells, non-chlorinated lines, main distribution trunk lines, treatment facilities, booster pump stations, distribution mains, and elevated and ground storage tanks. The U.S. Army Fort Bliss provides treated water to the Main Post and outlying ranges from government owned water treatment facilities and via the interconnects to the City of El Paso's water system.

There are 13 wells that supply ground water to the U.S. Army Fort Bliss Main Post area. The total capacity of all wells is 13,516 gallons per minute. The depths of the wells range from 295' to 398'. Eleven non-chlorinated lines transfer raw water from the wells to the treatment facility. The total length of non-chlorinated lines is 57,180 feet. The treatment facility

receives the raw water from the wells, then chlorinates and fluoridates the water, provides contact time, and pumps the water to storage tanks. Within the facility is a Williams Electric Co. monitoring system, which displays the water surface elevations in each of the storage tanks and the pump flow rates.

There are four main distribution trunk lines that transfer water from the pumps at the treatment facility to various areas within the Main Post. There are no individual services from these trunk lines. There are six booster pump stations and 20 water storage tanks located throughout the Main Post. Thirteen of the tanks are ground storage tanks with a total storage volume of 9,608,000 gallons. The remaining seven tanks are elevated storage tanks with a total storage volume of 2,900,000 gallons. The water level in each of the tanks is telemetered to the water treatment facility. The chlorinated water lines form the network for delivering potable water to the various services throughout the Main Post. The lines generally start at the water storage tanks or from the distribution lines off of the storage tanks, and terminate at service connections. Within the system there are about 811,718 feet of water main ranging in size from 2" to 20". The Main Post also contains 947 main line valves and 1059 fire hydrants. The water system is controlled by a computerized level control and scheduling system which has recently been upgraded by Williams Electric company.

J5.2.1.2 Inventory

Table 1 provides a general listing of the major collection system fixed assets for the U.S. Army Fort Bliss water distribution system included in the purchase. The system will be sold in an "as is, where is" condition without any warranty, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. Ancillary equipment attached to, and necessary for, operating the system, though not specifically mentioned herein, is considered part of the purchased utility.

TABLE 1
Fixed Inventory
Water Distribution System Inventory U.S. Army Fort Bliss

Item	Unit	Quantity on	Quantity on	Total
		Main Post	Ranges	
Pipe 2"	LF	785	860	1,645
2.5"	LF	0	345	345
3"	LF	8,996	525	9,521
4"	LF	41,170	3,955	395,133
6"	LF	345,533	49,600	228,227
8"	LF	203,967	24,260	107,082
10"	LF	101,777	5,305	85,590
12"	LF	57,635	27,955	6,200
14"	LF	6,200	0	28,015
16"	LF	28,015	0	17,640
20"	LF	17,640	0	4
Meters	Each	4	0	0
Building Services	Each	0	0	1,039
Main Valves	Each	947	92	73
Post Indic. Valves	Each	58	15	1,131
Fire Hydrants	Each	1,059	72	15
Ground Storage Tanks	Each	13	2	12
Elevated Tanks	Each	7	5	15
Wells	Each	13	2	6
Booster Pump Stations	Each	6	0	

LF = Linear Feet

J5.2.2 Water Distribution System Non-Fixed Equipment and Specialized Tools Inventory

Table 2 lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

TABLE 2
Spare Parts
Water Distribution System U.S. Army Fort Bliss

Qty	Item	Make/Model	Description	Remarks
None Identified				

TABLE 3
Specialized Equipment and Vehicles
Water Distribution System U.S. Army Fort Bliss

Description	Quantity	Location	Maker
None Identified			

J5.2.3 Water Distribution System Manuals, Drawings, and Records Inventory

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4
Manuals, Drawings, and Records
Water Distribution System U.S. Army Fort Bliss

Qty	Item	Description	Remarks
To be Identified in Technical Library	Same	Same	Same

J5.3 Specific Service Requirements

None Identified.

J5.4 Current Service Arrangement

The water treatment and distribution system at U.S. Army Fort Bliss consists of groundwater wells, non -chlorinated lines, main distribution trunk lines, treatment facilities, booster pump stations, distribution mains, and elevated and ground storage tanks. The U.S. Army Fort Bliss provides treated water to the Main Post from government owned water treatment facilities and from interconnects to the City of El Paso’s water system.

J5.5 Secondary Metering

The Base may require secondary meters for internal billings of their reimbursable customers, utility usage management, and energy conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Paragraph C.3.

J5.5.1 Existing Secondary Meters

TABLE 5
Existing Secondary Meters
Water Distribution System U.S. Army Fort Bliss

Meter Location	Meter Description
Approximately 100 locations to be furnished in technical library	

J5.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.17, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3, H.5, and J5.5 below.

TABLE 6
New Secondary Meters
Water Distribution System U.S. Army Fort Bliss

Meter Location	Meter Description
None Identified	

J5.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW paragraph G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

Name: Raymond Balderas

Address: Building 777 basement, Fort Bliss, Texas 79916

Phone number: (915) 568-3107

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall include the following information for Scheduled and Unscheduled outages:

Scheduled: Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

Unscheduled: Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.

Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

Name: Roger Briney

Address: Building 777, Room 320, Fort Bliss, Texas 79916

Phone number:

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

Name: Raymond Balderas

Address: Building 777 basement, Fort Bliss, Texas 79916

Phone number: (915) 568-3107

4. System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to:

Name: Joe E. Mathis

Address: Building 777 basement, Fort Bliss, Texas 79916

Phone number: (915) 568-3107

J5.7 Water Savings and Conservation Projects

IAW paragraph C.3, Utility Service Requirement, the following projects have been implemented by the Government for water conservation purposes:

- ?? Installation of low flow toilets
- ?? Installation of ground source heat pumps in new family housing
- ?? Installation of xeriscape landscaping throughout the Installation

J5.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the U.S. Army Fort Bliss boundaries to include the main cantonment area, Site Monitor Station, McGregor Range, Oro Grande Range Camp, Dona Ana Range Camp, and Biggs Army Airfield.

J5.9 Off-Installation Sites

Nearby to U.S. Army Fort Bliss, is the Beaumont Medical Center, which is a complex of the main hospital building, staff housing, and laboratory facilities that support the hospital activities. The requirement for water service to the Beaumont Medical Center is part of and associated with this scope.

J5.10 Specific Transition Requirements

IAW Paragraph C.17, Transition Plan, **Table 7** lists service connections and disconnections required upon transfer, and **Table 8** lists the improvement projects required upon transfer of the U.S. Army Fort Bliss Water Distribution system.

TABLE 7
Service Connections and Disconnections
Water Distribution System U.S. Army Fort Bliss

Location	Description
To be included in Technical Library	

TABLE 8
System Improvement Projects
Water Distribution System U.S. Army Fort Bliss

Project Location	Project Description
To be included in Technical Library	